Delivering Competitive High-Speed Broadband over Copper

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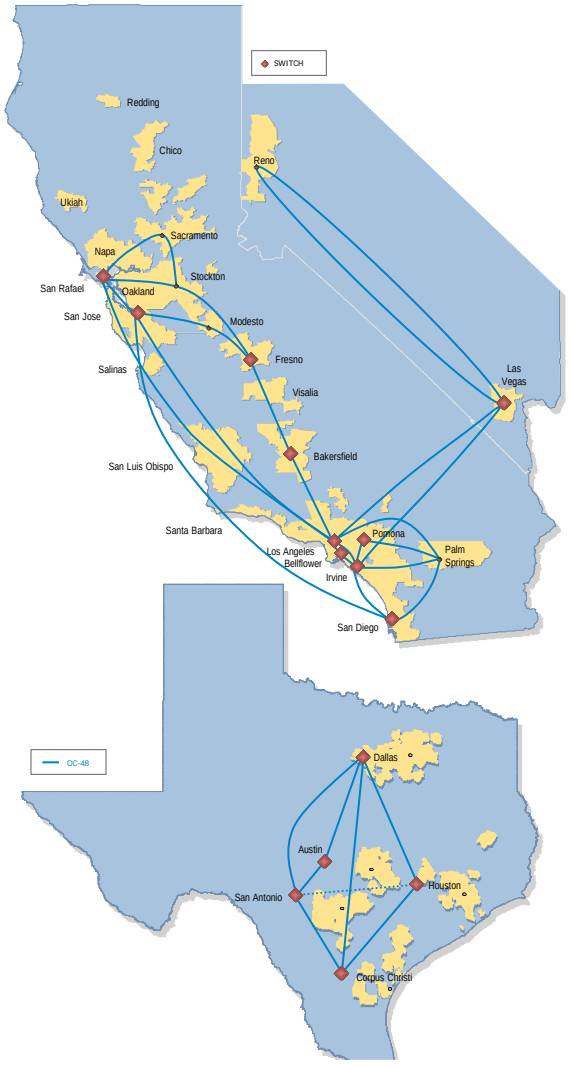
TelePacific Network Overview

- TelePacific is the leading alternative to the ILECs in the California, Nevada and Texas target SMB market.
- We offer service to about 20% of all SMBs in the U.S. Our target SMB market is worth about $8B.
- We are the only telecom provider with facilities-based network coverage for all of California. Assets include 29 switches, 293 owned collocations, and more than 57,000 fiber miles.
- We have our fiber to 108 LEC wire centers , to many data centers and to more than 200 commercial buildings.
- We offer a fully meshed Core IP network including multiple tier 1 peering points.
- Our multi-state MPLS IP network with QoS enables our OneNet services and is tied to multiple tier 1 providers to extend private networks through the U.S. and abroad.
- We have four SSAE 16-certified data centers with more than 25,000 square feet built and in use.
- We have a fixed wireless network in Las Vegas, SF Bay Area, Los Angeles, Orange County and the Inland Empire.
- We use 27 different “last mile access” providers.



Broadband Deployment

- 2010, 2011 and 2012 FCC findings that broadband is not being deployed to all Americans on a reasonable and timely basis
- Connected Nation estimates 1.8B businesses without broadband (http://www.connectednation.org/survey-results/business)
- Approximately 68% of buildings with 20 or more employees are not connected to fiber networks (source: Overture Dec. 7 *ex parte*)
- Broadband Plan Recommendation 4.7 urged the Commission to "take expedited action … to ensure widespread availability of inputs for broadband services provided to small businesses, mobile providers and enterprise customers."
- Copper loops are an important input in the deployment of competitive broadband options to small and medium sized businesses

Broadband Deployment

- August 22, 2012 Special Access Order acknowledged competitive deployment of last mile access facilities has not expanded beyond areas with significant concentration of business demand
- There are non-ILEC last mile access facilities available at only 12.5% of TelePacific's customer service addresses
  - Based on survey of available on net buildings from 27 alternative providers in 30 wire centers
- Commission should not condemn customers to a single broadband provider, or to a duopoly
- Industry and consumers need options to bridge the divide between today's largely copper-based networks and the mainly-fiber networks of the future

One Network

- Copper – whether hybrid fiber/copper or home run copper loops – will remain a prevalent and important part of the network for some time
- ILECs – including RBOCs – continue to rely heavily on legacy copper infrastructure
- Preserving access to copper permits CLECs to rely on copper just as ILECs continue to do
- EoC is generally an IP-based (not TDM) technology that relies on copper loops, preserving copper does not thwart the transition to IP-based networks

One Network

- Many ILECs (with the exception of Verizon's FiOS project) have foregone deploying fiber directly to residences and small and medium sized businesses
  - AT&T's U-verse network relies on a combination of fiber-to-the-node, ***copper*** subloops, and VDSL technology to bring broadband speeds to consumers
  - After AT&T-announced fiber investment is completed, 50% of its multi-tenant business locations will remain reliant on copper infrastructure for wire-based broadband services
  - AT&T admits that its Ethernet investments are a response to CLEC expansion of Ethernet availability
  - CenturyLink expanded EoC after purchasing Qwest into an additional 334 wire centers (FierceTelecom)

Ethernet over Copper

- EoC offers 3-50 Mbps capacity
- EoC leverages existing copper, allowing expansion of capacity by deploying network gear rather than major capital construction projects
- EoC avoids the time and expense of digging up streets to deploy fiber
- Average price of $550 for 10 Mbps EoC, compared to $350 for T1 (1.54 Mbps) or $3000 for DS-3 (45 Mbps) (source: www.shopforethernet.com)
- Each year more copper Ethernet ports are deployed than fiber Ethernet ports at a ratio of almost 2:1 (source: Overture Dec. 7, 2012 ex parte)

Ethernet over Copper

- The nine participating CLECs in our survey can reach ~ 2/3 of the 371,887 SMBs in California to offer a competitive broadband alternative using EoC
- Of the total number of CA SMBs, ~ 80% or 300,000 are within 12kft of their serving central office, a reasonable distance to receive 6 to 20+ Mbps of EoC
- In approximately 60% of the 343 wire centers, two or more of the surveyed CLECs offered EoC service, giving SMBs a choice among at least three fixed broadband providers
- Overall, the nine CLECs surveyed have deployed a total of 731 points of EoC presence in California

Nine CLECs' EoC Coverage in California

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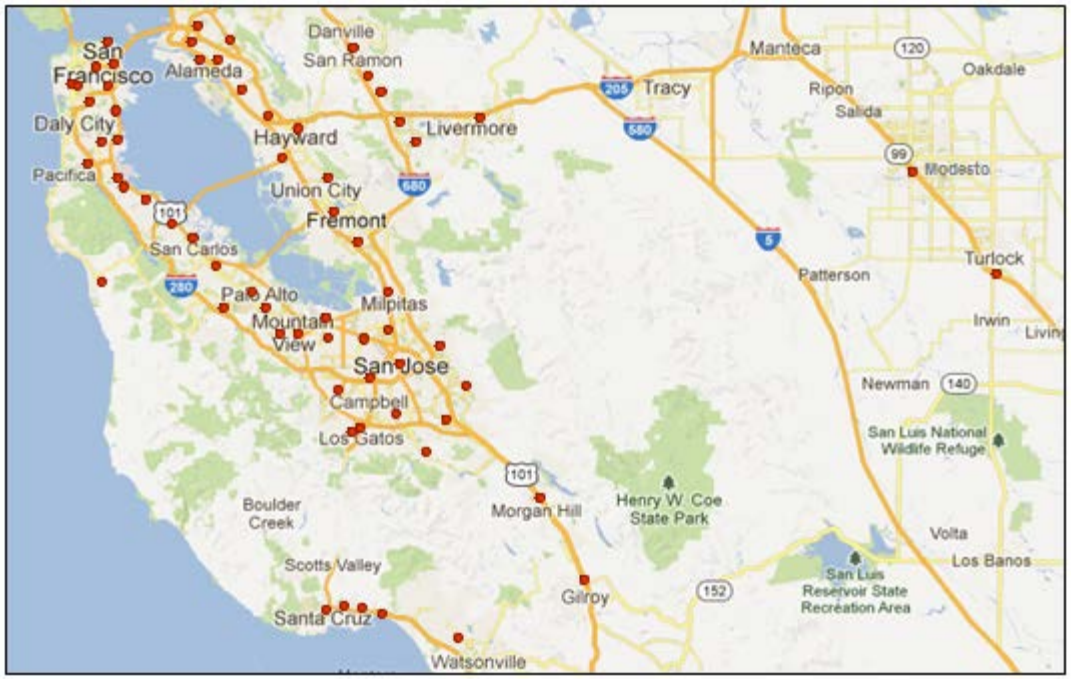
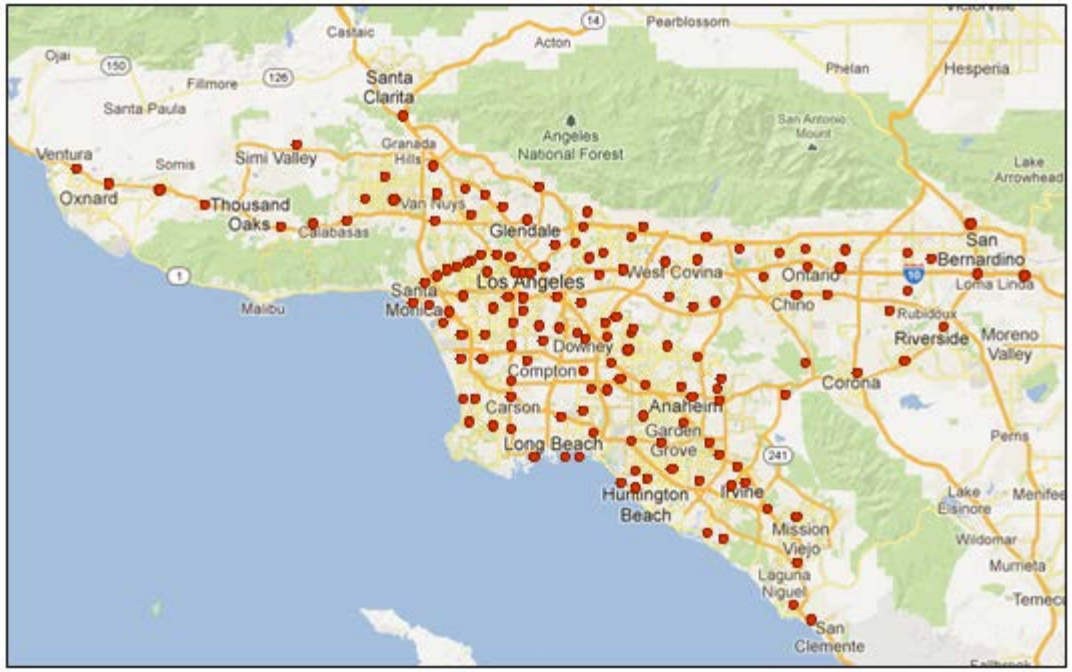


CA CLECs' Ethernet over Copper Service Areas 2013 - San Francisco Bay and Los Angeles Regions

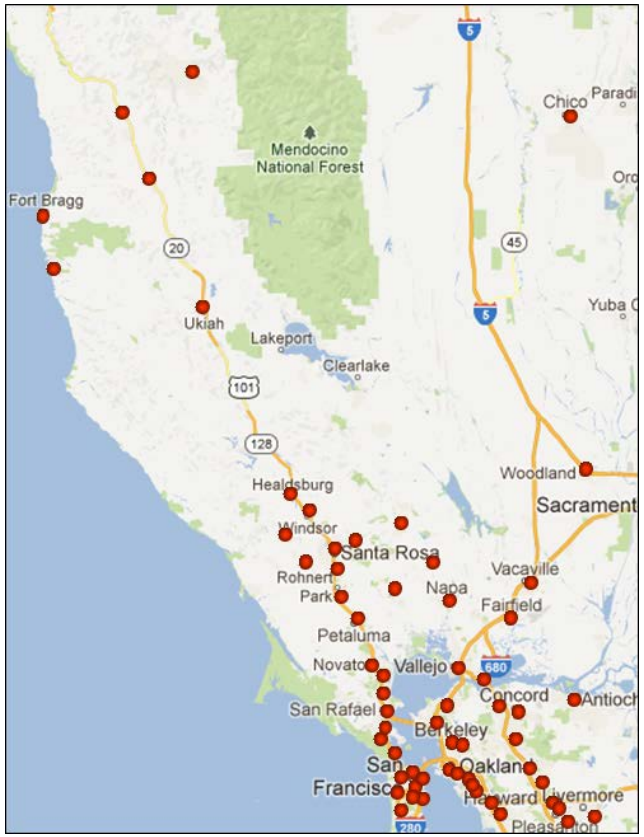
Nine CLECs' EoC Coverage in California



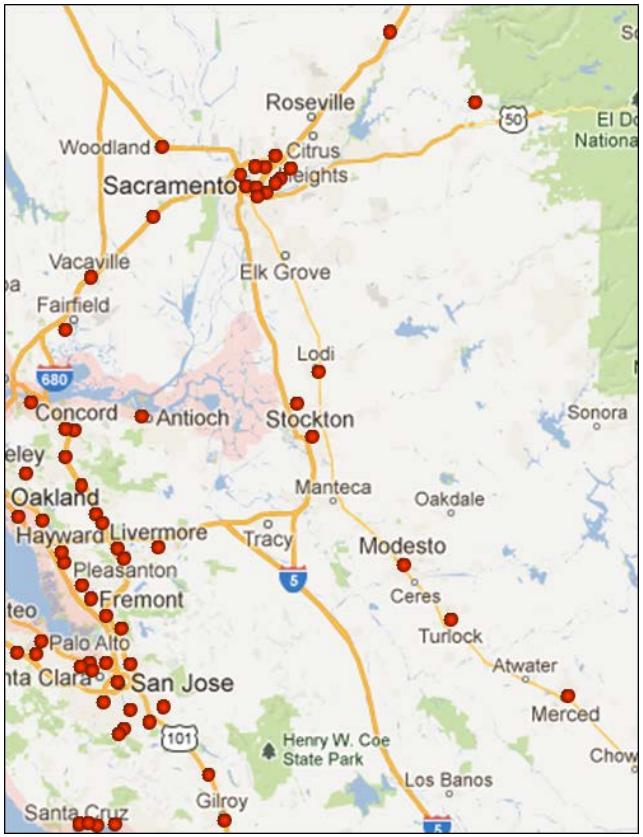
- CA CLECs' Ethernet over Copper Service Areas 2013 - San Francisco Bay and Los Angeles Regions

Nine CLECs' EoC Coverage in California

Northern California

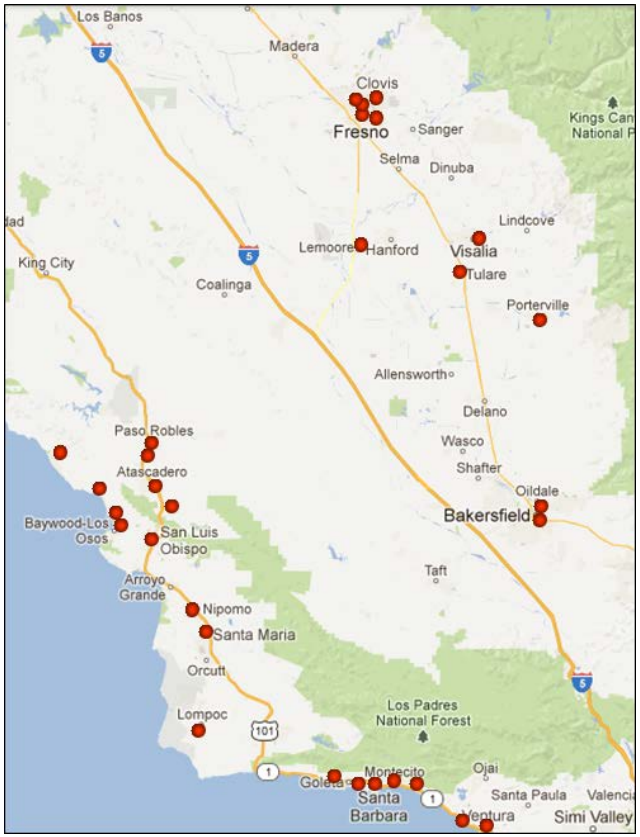


Sacramento

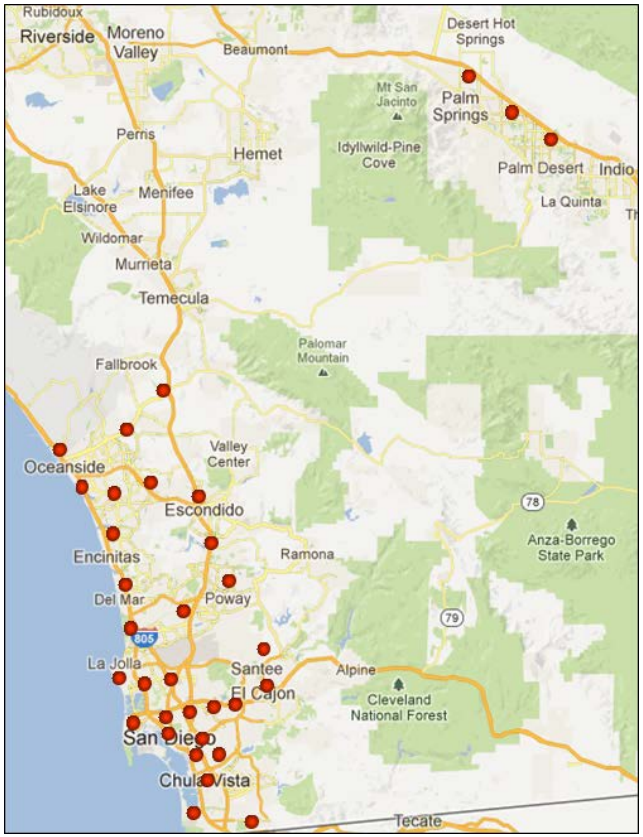


Nine CLECs' EoC Coverage in California

Central California

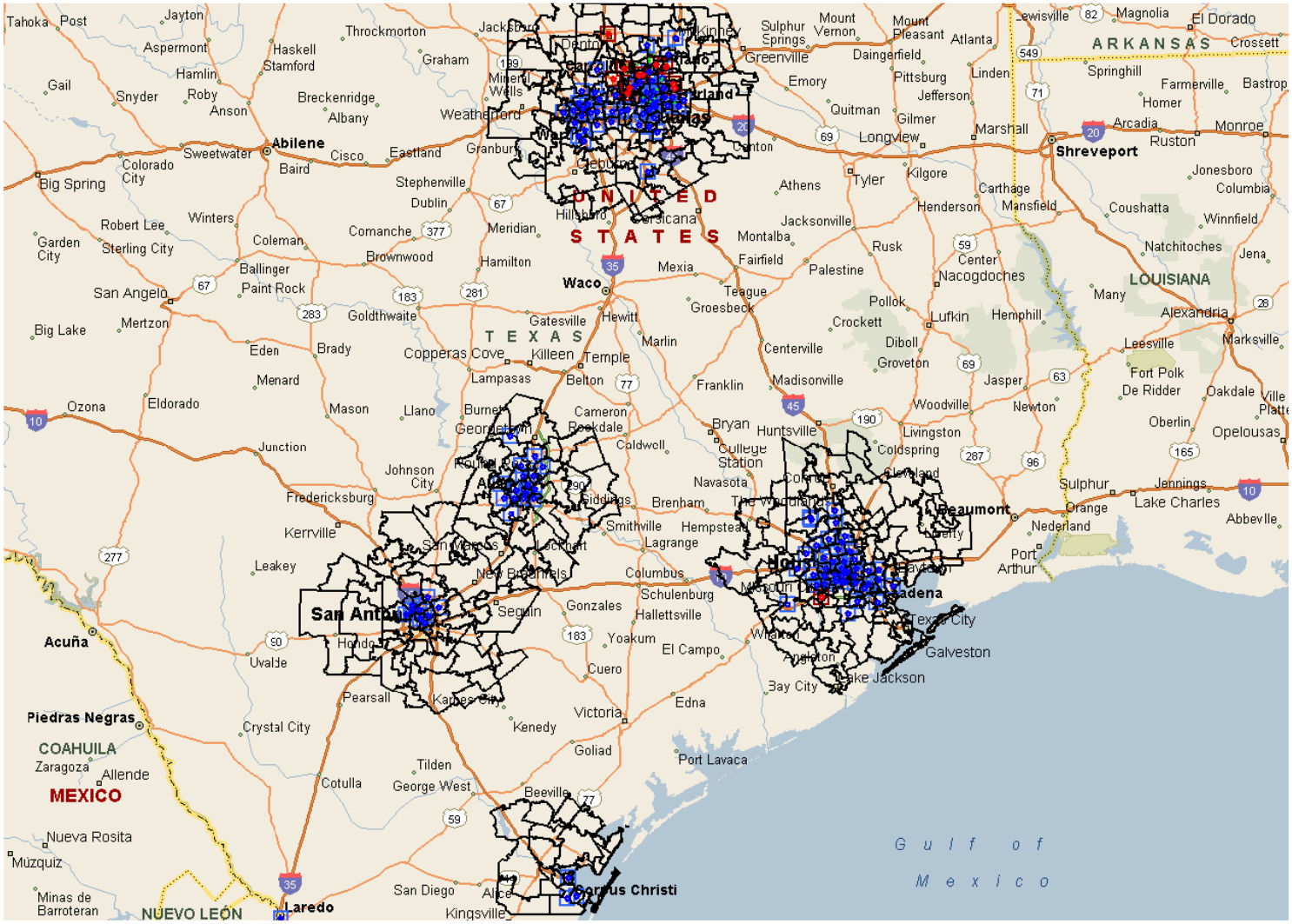


San Diego



Six CLECs' EoC Coverage in Texas

STATE OF TEXAS



Update Copper Retirement Rules

- Broadband Plan recommendation 4.9 urges the Commission to “ensure appropriate balance in its copper retirement policies.”
- Commission should modify its copper retirement rules to ensure that
  - customers currently receiving broadband over copper loops do not lose their affordable broadband service and
  - the rules promote the regulatory certainty necessary for further investments in development of new technologies for affordable broadband over copper

Update Copper Retirement Rules

- Suspend the current rules regarding copper retirement
- Reverse “deemed denied” standard
- Clarify “retirement” does not permit physical removal
- Separately define standard for removal
- Apply the retirement rules to the feeder portion of the loop
- Make retirement/removal data easily accessible and searchable
- Clarify that state commissions may adopt restrictions on disconnection, removal, or disabling of copper loops that are stronger than the Commission’s rules.